Consumption contexts matter in wine choice. Context variables describe where, when and with whom one consumes wine. They have been argued to be systematically linked to choice preferences in several food choice studies (Jaeger and Rose, 2008). It is easy to see why descriptors of consumption context are relevant to preference analysts: if consumption context variables do a better job than other commonly used socio-economic covariates at helping explain preference heterogeneity, then these contexts can be the target of marketing campaigns to provide, for example, more socially desirable patterns of consumption. A typical model of this type requires the identification of groups of respondents with similar consumption contexts. Probability memberships to these groups than feed in some form into the conditional choice function, which in turn can segregate in latent groups with similar preference.

One important obstacle is represented by the categorical and ordinal nature of contextual variable scores. Typically respondents provide ordinal scores as answers to a series of questions, which indicate location in a score ladder measuring intensity. Because of their ordinal nature these scores cannot be meaningfully treated as numerical, which would reduce the dimensionality of the model variables and simplify simultaneous estimation of the contextual variables effects and choice functions. Therefore, when several contexts need characterizing, only two stage estimation is practical, in which the functions of context variables are estimated separately and prior to the choice model. As a result the estimates are typically inefficient, but not necessarily biased. However, loss of efficiency can be tempered by a large enough sample size.

In this study we also deal with another issue in preference heterogeneity analysis, that is the unobserved heterogeneity of error scale. In our estimation approach we fit wine choice panel data to latent class model specifications that simultaneously account for inter-personal variation in scale and taste. Independence between
scale and preference classes is relaxed by allowing for correlation between the two. Yet, one of the aims is to separate variations in preference intensities across respondents from those in the degree of determinism in choice behaviour.

To explore the power of this approach we use both revealed and stated preference data on choice of Prosecco wine, which is a sparkling white Italian wine. This wine has long been well-known in Italy, but it has recently enjoyed an extraordinary success in the export market. Today this informal and vivacious Italian wine is appreciated the world over. One of the key factors for its success has been the quality-price ratio and its large range of products.

The data collection took place at seven supermarkets/malls in the provinces of Treviso and Padua. All these malls were located within 80 km of the main area of Prosecco production and displayed many different brands of Prosecco in their wine shelves. The survey was conducted in the months of May 2009-December 2010.

Collection of mixed RP/SP data structure is challenging. The survey instrument needed to be of short duration to avoid withholding respondents for too long after having observed their RP choice, that is, the purchase selection of the consumer subject of investigation. Speed is of the essence if high rates of response are to be achieved. As a consequence, a very simple format of questioning was developed to derive the SP data. As mentioned in the previous section, the survey was designed by following the innovative method proposed by Train and Wilson (2008, 2009). A series of focus groups and pilot studies led us to believe that the following survey structure was adequate. This resulted in a sequence of answers to wine bottle choice questions.

These questions were preceded by a few other questions, which aimed at collecting information of the subject's socioeconomic variables. These included: gender, profession, education, wine consumption (places, frequency), and knowledge of Prosecco denominations and brands. A total of 487 respondents took part in the survey.

In order to characterize each of the various choice contexts facing the respondent additional information was collected on the attributes of the wine bottles. These included: type of certification about denomination of origin (CDO – CGDO), type of wine (sparkling - semisparkling), brand name (there were more than 60 brand names Valdo, Mionetto, Carpenè, etc.), cost of the bottle as displayed at the shelf.

To this extent, the total number of Prosecco bottles displayed in each supermarket within the shelves was recorded and coded in order to have the entire set of alternatives in the choice contexts and their associated wine attributes. Summary statistics of respondents show that almost 70% of are men and they are on average 44 years of age. Fifty-six percent of them are white-collar workers, almost 30% are selfemployed and 9% are retired. Half of men were high school graduates and 29% hold a graduation degree at the university. Women averaged 40 years of age. In terms of employment almost 60% of them worked in an office and the percentage of managers is halved compared to men (15%). Fifty percent of women are housewives. The percentage of women holding a high school degree is almost the same as men, but 36% of women are university graduates. Almost 60% of the respondents had annual household net incomes less or equal to €30,000, 27% between €30,000 and €50,000, and 13% over €50,000.

Our objective is to investigate the additional interpretative power of answers to questions on contexts of consumption as well as accounting for different degree of choice determinism on preference heterogeneity. Results demonstrate that together the two effects greatly improve the fit of the model to the data, thereby providing evidence of the importance of accounting for both sources of variation.